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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/625,108

07/22/2003

Robert James Howard

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EXAMINER

CALLAHAN, PAUL E

ART UNIT

PAPER NUMBER

2137

MAIL DATE

DELIVERY MODE

10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/625,108

Applicant(s)

HOWARD ET AL.

Examiner

Paul Callahan

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 24-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-21 and 24-31 is/are allowed.
- 6) ☐ Claim(s) 32-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 and 24-38 are pending in the instant application and have been examined. This Office Action is responsive to the Applicant's reply filed July 30, 2007.

Response to Arguments

2. Applicant's arguments filed July 30, 2007 have been fully considered but they are not persuasive.

The Applicant argues in traverse of the rejection of claim 32 under 35 USC Sec. 102(b) as anticipated by Low, that a missile's on-board processor cannot constitute a "peripheral" to a remote launch computer. The Applicant cites the Wikipedia website in support. The Examiner counters that the definition adopted by the Applicant is unduly narrow, and that a more common definition of a computer "peripheral" is any device controlled by the computer's processor and not in direct physical contact with the computer's housing. The Examiner notes also that the Wikipedia site may be edited and added to by anyone who volunteers to do so with no particular expertise required. Therefore, the Wikipedia site should not be considered as a source of definitive information on any subject.

The Applicant argues that Low fails to teach a "keyed connector" as claimed. However, the Examiner maintains that the connector arrangement depicted by Low which utilizes screws to secure a cover plate to a connection as an aid in securing the connection between the male and female components, and where the connection is

made by locking pins, does indeed constitute a "keyed connector" when the term is reasonably broadly construed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 32, 37, and 38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Low et al., US 3,611,274.

As for claim 32, Low teaches an apparatus comprising a first adapter and a second adapter (fig. 1, col. 2 lines 39-48), wherein said first adapter couples a first port associated with a computer peripheral to said second adapter, said second adapter couples said first adapter to a second port associated with a processor (col. 1 line 18-28: the connectors are taught as connecting umbilical cables ending in processing circuits in a missile and a launch facility, the use of a port at each terminus is inherent, the missile processor circuits constitute a peripheral to a launch facility processor); said first adapter comprises a first keyed-connector; said second adapter comprises a second keyed-connector; and said second keyed-connector mates with said first keyed-

Art Unit: 2137

connector (fig. 1, elements 10, 12, 14, 18, col. 2 lines 39-56: the connectors are held by screws 18 which constitutes a keyed connector).

As for claim 37, Low teaches the apparatus of claim 32 wherein said first keyed-connector is chosen from the list consisting of a tamper-proof seal, a screw head, and a physical key (fig. 1, element 18, col. 2 lines 39-56: the connectors are held by screws 18 which constitutes a keyed connector).

As for claim 38, Low teaches the apparatus of claim 32 wherein said first keyed-connector is destroyed when removed from said first port (col. 1 lines 39-48: the connectors are taught as "breakaway" connectors which are destroyed when tension of a threshold value is placed on the umbilical cables).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Low as applied to claim 32, and Munger, Jr. et al., US 6,821,159.

As for claim 33, Low teaches the apparatus of claim 32, but not wherein said first keyed-connector and said second keyed-connector are unique for each peripheral. However, Munger teaches a system wherein a keyed connector may be uniquely configured such that a male and female connector may be connected with only each other. Official Notice may be taken that the use of such an arrangement in connecting peripherals to a main processor is old and well known in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate these features into the system of Low. It would have been desirable to do so as such an arrangement would prevent misconnection of a missile to an onboard aircraft processor. Motive to make the combination is found in Low col. 1 lines 13-28 where the importance of properly configuring a missile in a "pre-launch but mated configuration."

As for claim 34, Low teaches the apparatus of claim 32, but not wherein said first keyed-connector and said second keyed-connector are unique for a peripheral type. However, Munger teaches a system wherein a keyed connector may be uniquely configured such that a male and female connector may be connected with only each other. Official Notice may be taken that the use of such an arrangement in connecting peripherals to a main processor is old and well known in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate these features into the system of Low. It would have been desirable to do so as such an arrangement would prevent misconnection of a missile to an onboard

aircraft processor. Motive to make the combination is found in Low col. 1 lines 13-28 where the importance of properly configuring a missile in a "pre-launch but mated configuration."

As for claim 35, Low teaches the apparatus of claim 32, but not wherein said first keyed-connector and said second keyed-connector are unique for a computer network associated with said processor. However, Munger teaches a system wherein a keyed connector may be uniquely configured such that a male and female connector may be connected with only each other. Official Notice may be taken that the use of such an arrangement in connecting a processor to a network is old and well known in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate these features into the system of Low. It would have been desirable to do so as such an arrangement would prevent misconnection of a missile to an onboard aircraft processor where the missile is typically remote from a launch facility. Motive to make this combination is found in Low, col. 1 lines 13-28, where the importance of properly configuring the connection between a missile and a launch facility are discussed.

As for claim 36 Low teaches the apparatus of claim 32, but not wherein said first keyed-connector and said second keyed-connector are unique for a product type. Munger teaches a system wherein a keyed connector may be uniquely configured such that a male and female connector may be connected with only each other. Official

Art Unit: 2137

Notice may be taken that the use of such an arrangement in connecting a processor to a particular product type is old and well known in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate these features into the system of Low. It would have been desirable to do so as such an arrangement would, for example, prevent the use of an umbilical cable not designed to operate properly with a missile. Motive to make this combination is found in Low, col. 1 lines 13-28, where the importance of properly configuring the connection between a missile and a launch facility are discussed.

Allowable Subject Matter

7. Claims 1-21 and 24-31 are allowed.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2137

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



/Paul Callahan/
October 11, 2007


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER